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ABSTRACT

Reviewing the state of the art of southern rural development education needs, this paper presents tabular and narrative data re: (1) Current Expenditures by Region and Type of School District Per Pupil Enrolled in Public Primary and Secondary Schools; (2) Current Expenditures Per Pupil Enrolled in Public Primary and Secondary Schools by Region and Type of School District; (3) Public School Enrollment: Actual (1970) and Projected (1975 and 1980) Regional Proportions Compared with 1974 Actual Regional Proportions; (4) Public School Current Expenditures: Actual (1970) and Projected (Series E, 1975 and 1980) Regional Proportions Compared with 1974 Actual Regional Proportions; (5) Ratio of Public School Enrollment Regional Proportions to Current Expenditure Regional Proportions: Actual (1967) and Projected (1975 and 1980) Ratios Compared with 1974 Ratios; (6) Estimated and Projected Five Year Plant Replacement Rates by Type of District within Region (percent of capacity); (7) Average Interest Rates, Local Public School Bond Issues, by Region and Type of District; (8) Share of New Public School Construction Financed by Local Bond Issues, by Region; (9) Scalogram of Dissertation Abstract DATRIX II Search by State Name and Two Additional Sets of Descriptors: School(s) and Selected Analytic Terms; (10) Solicitation of Community Involvement in Public Education Needs Projection: A Regional Comparison of Doctoral Dissertation Titles and Abstracts (1965-75). (JC)

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Forecasting Education Needs for Southern Rural Development: State of the Art*

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While my intent in this research review is to be unbiased, a second reading has revealed a tone of advocacy. It is only fair to say, in spite of the opinion of our Governor friends in other regions, that from the perspective of the clientel of Southern rural education this presentation may more properly be titled, "We may be in the sun belt, but there is still plenty of shade here in the woods."

I've decided that a tone of advocacy was appropriate. As has been said before, "Needs without advocates will not be considered." Such a tone will hopefully invite dialogue and, perhaps, better research than I have had at my disposal. And no doubt, considering our vantage point, more enlightened research reviews will result.

Nationwide, enrollments in primary and secondary public schools have leveled off and even declined from 46 million in 1971 to less than 45 million now. Thus, if investment in public education through high school is to at least remain constant (in real dollars) it will have to be justified in terms of improved quality or equal opportunity defined in equal expenditures rather than in terms of greater numbers of students. This is in spite of the fact that the relationship between cost and quality in education is exceedingly difficult to document. What is clear, at least to the President's Commission on School Finance, is that parents with the means to do so usually choose schools which cost more to operate than the schools they reject.[1]

Therefore, if the dual objectives of improving quality and providing equal opportunity for all are to be implemented at the same time, the real dollar investment in public education almost certainly will have to increase.

Recommendations to Reduce Inequalities in School Finance

The President's Commission, viewing inequality in school financing as a major impediment to providing equal education opportunity countrywide, makes three major recommendations which, ostensibly, would increase the investment in rural education in the South. Specifically, the commission recommends relief to unequally taxed property owners in the form of increased state level collection of revenues and funding of public schools, second; increased emphasis on early childhood education with more federal aid to include low-income children and, third; that Title I funds now being provided to states and local school systems for the education of children from low-income families be allocated according to the relative concentrations of these children within each school system. Southern rural school districts with typically poorer tax bases and larger concentrations of low income families

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would presumably benefit from implementation of all three recommendations.[2]

However, I suspect that an analysis of the potential impact of these three recommendations would show that rural Southern schools would gain relatively little.

The most expensive of the three recommendations, state aid, is proposed to cost roughly three times as much in federal incentives as the other two combined. Yet, Southern states and rural districts probably stand to profit the least of any in the U. S. from implementation of the state aid recommendation. First, property taxes which are those to be equalized are not the major source of education revenues in the South. Second, in spite of proportionately larger federal contributions, 15 of the 17 Southern states already collect more of their education revenues at the state level than do the median states, (Kansas, 40.1% and California, 42.4%, 1973-74). Only two Southern states, Missouri and Virginia, exceed the national average (50.1%) in education revenues collected from local levels.[3]

Finally, full state aid at uniformally low levels may be worse for education than less equal local financing. While Commission studies show no relationship between state financing and state regulation of public education, and even a positive correlation ($r = .39$) between state financing and local innovation, the top ranking state aid state had one of the three lowest innovation scores. This state, North Carolina, was the only Southern state in the sample of 10.[4]

This finding of high state aid and low innovation, treated as a single exception to an otherwise positive relationship by the President's Commission, is suspected to be the rule in the South. For example, in his research perspective on Sociology and Economics of Education in the South, C. Arnold Anderson "...doubts the strong Southern predilection for centralized funding of schools. Given the racial and status tensions about education, centralization may have retarded accommodation to new developments and inhibited would-be-pacesetter communities from moving confidently ahead to new educational programs."[5]

In any event, it seems fair to conclude that state aid is already the predominate source of education funds in Southern states and that state aid has not overridden the negative effects of low expenditures per student upon the levels of innovation. When funds are insufficient to comply with accreditation standards, few resources will be devoted to local desires for change.

Thus only two of the Commission's eleven recommendations, early childhood education and redistribution of Title I funds, stand to directly benefit finance of Southern schools in general and the region's rural schools in particular. However, state aid, the big apply, may placate the non-South and thus pave the way for welfare reform and early childhood education shifts to the rural South.

But, from another perspective, perhaps the South doesn't need much additional help.

With increasing economic growth in the South, we are told state and local tax bases should be increasing. Properly taxed, revenues from these expanding bases should lead to absolute and relative increases in average expenditures per student. Continued out-migration and declining birthrates should enhance the size of the share. At least these have been the assumptions underpinning the projections made for the President's Commission on School Finance.

A Look at Available Projections

In Table 1, we see current expenditures per pupil by region. In 17 Southern states, which schools a third of the nation's students, current expenditures per student were $469, 79 percent of the U.S. average in 1967-68. They were projected to gain $243 in 1967 buying power by 1975. The relative share for the student in the South was projected to increase to 83 percent of the national average. To make up for this relative gain of four percent in the South, the Northeast was projected to slide two percent from 127 percent, the North Central two percent from 100 percent, and the West four percent from 106 percent of the national average.

Table 2 provides a breakdown of the expenditure data by type of school district for the base period 1967-68 and the projections for 1975-76. Here it is seen that non-SMSA districts schooled 15,021,000 children in 1967-68, more than one-third of the nations youth. Of these more than 6.3 million or 42 percent are schooled in the non-SMSA districts of 17 Southern states from Texas to Maryland. Current expenditure per rural Southern public school students were estimated to be $447 in 1967-68, 83 percent of the national non-SMSA average. The projected increase to $668 by 1975-76 amounts to 86 percent of the national non-SMSA forecast.

Projections and Estimates Compared: Enrollment - A Surprise

While these projections are more or less in line with what is thought to have happened and while data are more available now than then, we have not found an update of the analyses and projections in the literature. Therefore, for discussion we have prepared a compilation for comparison with current (1974-75) estimates. To avoid making adjustments for the buying power of the dollar the data is presented in terms of regional proportions of the U.S. totals. In Table 3A is found a comparison of the relative size of the enrollments for the four regions. In 1970 the South still enrolled nearly one-third of the nations public school students while the Northeast enrolled 21.3 percent, the North Central 28 percent, and the West 18.5 percent. The projections to 1975 show the South's proportions declining along with the North Central while the West and Northeast were to have increases slightly.

Table 1. Current Expenditures by Region and Type of School District Per Pupil Enrolled in Public Primary and Secondary Schools.

Region	ESTIMATES 1967 - 68 Enrollment in Thousands	Expenditures per Pupil	Percentage of National Average	PROJECTIONS 1975 - 76 (1967-68 Dollars) Current Expenditures per Pupil	Percentage of National Average
Northeast	9,405	$755	127%	$1076	125%
Northcentral	12,552	$591	100%	$ 845	98%
South	14,329	$469	79%	$ 712	83%
West	8,164	$629	106%	$ 881	102%
U.S. Average	44,450	$593	100%	$ 860	100%

Froomkin, Joseph; J. R. Endriss, Robert W. Strump. Population, Enrollment and Costs of Public Elementary and Secondary Education for 1975-76 and 1980-81. The President's Commission on School Finance.

Table 2. Current Expenditures Per Pupil Enrolled in Public Primary and Secondary Schools by Region and Type of School District.

Type of School Districts	Regions Northeast	Northcentral	South	West	Total
Central Cities:					
Enrollment in Thousands 1967-68	2,990	3,643	5,101	2,804	14,538
Current Expenditures 1967-68 Estimates	$ 800	$ 626	$ 480	$ 663	$ 618
Current Expenditures 1975-76 Projections (1967-68 Dollars)	1,144	$ 900	$ 742	$ 918	$ 898
Other SMSA:					
Enrollment in Thousands 1967-68	4,325	4,465	2,899	3,202	14,891
Current Expenditures 1967-68 Estimates	$ 763	$ 585	$ 496	$ 620	$ 627
Current Expenditures 1975-76 Projections (1967-68 Dollars)	$1,091	$ 845	$ 759	$ 873	$ 906
Non-SMSA:					
Enrollment in Thousands 1967-68	2,090	4,444	6,329	2,158	15,021
Current Expenditures 1967-68 Estimates	$ 674	$ 568	$ 447	$ 596	$ 536
Current Expenditures 1975-76 Projections (1967-68 Dollars)	$ 965	$ 804	$ 668	$ 841	$ 774

Froomkin, Joseph; J. R. Endriss, Robert W. Strump. Population, Enrollment and Costs of Public Elementary and Secondary Education for 1975-76 and 1980-81. The President's Commission on School Finance.

In fact the South's proportion of public school enrollment has increased. Out-migration from many Southern rural areas to Southern cities may have continued, but a net out-migration has become a net in-migration. Private schools have not grown as rapidly as expected and birth rates, perhaps, have not dropped as far. Meanwhile, enrollment rates including kindergartens have climbed. On the other hand, the Northeast's proportion of the nation's enrollment has declined rather than increased. In-migration has slowed, birth rates have dropped to very low levels, enrollment rates have eased off, and private schools have not yielded to rising costs as rapidly as expected.

Projections and Esimtated Compared: Expenditures - A Disappointment

Total enrollment is down from 46 million to 45 million as the baby boom passed. Therefore, the shift in the school budget formula from quantity to quality and equality should have a chance to work. However, inflation has taken its toll and projections of increasing dollars do not necessarily translate into more buying power. In fact HEW projections show public education buying power to be flat up through 1985.[7] This does not rule out regional shifts in buying power, however. If the formula is working, the proportion of the nation's public education expenditures flowing through school systems in the South should be increasing.

Revenues resulting from local growth should be growing faster than in the rest of the nation so that, in spite of an increasing proportion of the nation's enrollment and rapid inflation, public school students in the South should be benefiting from an increasing share of the nation's investment. The projections show that the increase from the lowly base of 79 percent should be an annual increment of 1/2 of 1% of the national average since 1967-68. As we see in Table 3B, the South has experienced a relative increase in current expenditures. But, when enrollment increases are taken into account (Table 4) the increase is only slightly more than one-fourth that projected or about 1/7 of 1% of the national average annually. Meanwhile, the Northeast, which was to have declined, has also increased but, from a much higher 127 percent to 128 percent of its share of per student expenditures during the same time period.

Historically, perhaps this is not unusual. Areas with declining enrollments and out-migration experience increased levels of expenditure per student while those increasing their enrollments experience lags in upward budget adjustments. In this respect, the South has fared as well as could be expected. The test lies ahead as to whether the revenues can be generated in a relatively more rural growth environment than has been the case historically. Industry and growth enterprises are seeking relatively more rural locations partly to avoid the costs of big cities, including taxes. Presuming local tax effort will continue to be important in financing schools, particularly construction, numerous non-SMSA municipalities will have to organize efficient taxing systems in addition to state level mechanisms. The

Table 3A. Public School Enrollment: Actual (1970) and Projected (Series E, 1975 and 1980) Regional Proportions Compared with 1974 Actual Regional Proportions.

Region	Actual[1] 1970	Projections[2] 1975	1980	Actual[3] 1974
Northeast	21.32	21.85	22.16	21.66
Northcentral	27.96	27.48	27.23	27.72
South	32.23	31.74	31.07	32.46
West	18.49	18.92	19.53	18.16

Table 3B. Public School Current Expenditures: Actual (1970) and Projected (Series E, 1975 and 1980) Regional Proportions Compared with 1974 Actual Regional Proportions.

Region	Actual[4] 1967	Projections[4] 1975	1980	Actual[5] 1974
Northeast	26.92	27.39	27.29	27.78
Northcentral	28.14	27.06	26.45	28.13
South	25.48	26.24	26.82	25.96
West	19.46	19.30	19.44	18.13

[1] Froomkin, Joseph, J. R. Endriss, and Robert W. Strump. Population, Enrollment and Costs of PUblic Elementary and Secondary Education for 1975-76 and 1980-81. The President's Commission on School Finance. Section 2, Table 4. 1972.

[2] Ibid., Section 1, Table 9. Projections apply to U. S. Department of Commerce, Bureau of the Census, Population Estimates and Projections, Series E, 1975-1980, Series P-25, No. 448, Table 2, p. 37, adjusted by the relationship between the 1970 Series E and the 1970 advance report of population, PC (V 2).

[3] Computed from Grant, W. Vance and George Lind. Digest of Education Statistics 1975 Edition. National Center for Education Statistics, U. S. Department of Health, Education and Welfare. 1976, Table 26.

[4] Froomkin, et. al. "Projections..." Section 4, Table 41.

[5] Computed from Grant et. al. "Digest..." Table 70.

Table 4. Ratio of Public School Enrollment Regional Proportions to Current Expenditure Regional Proportions: Actual (1967) and Projected (1975 and 1980) Ratios Compared with 1974 Ratios.[1]

Region	Actual Ratio 1967	Projected Ratio 1975	1980	Actual Ratio 1974	1974 Actual Ratio as a Percent of the 1975 Projected Ratio
Northeast	1.272	1.254	1.232	1.283	102.31%
Northcentral	.997	.985	.971	1.015	103.05%
South	.790	.827	.863	.800	96.74%
West	1.059	1.020	.995	.998	97.84%

[1] Computed from Table 3.

historical experience of catching up with rapid growth has accrued to SMSAs. Dealing with and providing for a rapidly growing private sector is a new experience for the public sector in the non-SMSA South.

Just a glimpse at the task with regard to public school construction broken down by region and by type of school district is provided in Tables 5, 6, and 7. It is apparent in Table 5 that construction in non-SMSA districts in the South has been considerably delayed. Perhaps the prevailing thought has been that everyone would leave. Because of slightly lower construction costs the task is lightened, but borrowing costs (Table 6) in non-SMSA Southern districts are typically higher than any other type of school district outside of the central cities of the Northeast. Furthermore, Southern districts are more dependent upon local bond issues than are other districts (Table 7).

In light of the massive backlog of construction in the South, and the fact that most of it is dependent upon local taxing powers suggests that my earlier comments on the value of increased state aid may need revision. The President's Commission is not explicit about how construction costs should fit into the picture. It is clear that modernization of many rural schools in the South would place excessive strain on the local tax base. Not only are the tax bases inadequate, but the relatively low productivity levels they represent lead to higher interest rates on their bond issues. More aid for school construction in many rural Southern districts is needed if anything approaching equality is to be achieved.

A Proper Mix of Leadership for Improved Rural Education

As a part of the process of non-SMSA municipalities and their school boards gearing up to the task of financing education and arriving at a just and proper mix of federal, state and local revenues, an intensive community involvement experience will most surely evolve. Our knowledge about the evolution of community involvement in non-SMSA Southern districts is very limited. The integration experience was largely imposed from the outside and it is still being digested. A campaign leading to a successful vote to float a major tax bond issue in an integrated rural Southern school district is still a rare if ever experience. Organization of a rural lobby to promote increased proportions of Title I funding for predominately low-income districts is also non-existent, but it is probably safe to say that none of these things will happen without considerable local community involvement. A quote from the Sixth Annual Report of the President to the Congress on Government Services to Rural America is indicative.

"The Federal Government will continue in its efforts to improve the quality of life in Rural America through support and encouragement of the development that is so clearly now a part of our rural communities. As in the past, however, it is the local people themselves, through their own initiatives and energies, who must determine the manner in which their communities will grow and change, Government must not intrude on this basic American right."[8]

TABLE 5

ESTIMATED AND PROJECTED FIVE YEAR PLANT REPLACEMENT
RATES BY TYPE OF DISTRICT WITHIN REGION
(PER CENT OF CAPACITY)

	ELEMENTARY		SECONDARY	
REGION	1967-70	1971-80	1967-70	1971-80
Northeast				
Central Cities	6.6	15.5	10.8	17.1
Other SMSA	15.3	12.5	23.1	15.0
Non-SMSA	21.3	12.5	19.8	15.0
North Central				
Central Cities	8.3	14.6	16.4	15.0
Other SMSA	13.9	12.5	22.0	15.0
Non-SMSA	15.7	12.5	23.5	15.0
South				
Central Cities	10.5	18.7	13.0	16.0
Other SMSA	19.1	12.5	25.9	15.0
Non-SMSA	10.9	13.3	-	22.5
West				
Central Cities	-	18.7	18.3	15.0
Other SMSA	15.6	12.5	-	22.5
Non-SMSA	14.5	12.5	22.3	15.0

SOURCE: 1967-70 Figures derived from School Management Magazine data file as tabulated in Joseph Froomkin, Et. Al., A Report to the President's Commission on School Finance: Population, Enrollment, and Costs of Public Elementary and Secondary Education 1975-76 and 1980-81. 1971

TABLE 6

AVERAGE INTEREST RATES, LOCAL PUBLIC
SCHOOL BOND ISSUES, BY REGION AND TYPE OF DISTRICT

REGION	INTEREST RATE (PER CENT)
Northeast	
Central Cities	6.88
Other SMSA	5.95
Non-SMSA	5.54
North Central	
Central Cities	5.84
Other SMSA	5.87
Non-SMSA	5.63
South	
Central Cities	5.52
Other SMSA	5.67
Non-SMSA	6.04
West	
Central Cities	5.51
Other SMSA	5.49
Non-SMSA	5.67

Computed from a sampling of school bond issues, July 1969 - May 1971, compiled by the American Bankers' Association for the U. S. Office of Education. Regional averages are weighed using construction outlays from School Management magazine data file. Joseph Froomkin, et. al., Projections...loc. cit.

TABLE 7

SHARE OF NEW PUBLIC SCHOOL CONSTRUCTION
FINANCED BY LOCAL BOND ISSUES, BY REGION
(IN MILLIONS OF CURRENT DOLLARS AND PER CENT)

	CONSTRUCTION 1967 to 1970	PER CENT FINANCED by bond issues
Northeast	4,325	78.4
North Central	4,207	84.3
South	2,784	96.9
West	2,270	77.5
TOTAL U. S.	13,586	83.5

SOURCE: Bonds issued: Compiled from U. S. Department of Health, Education, and Welfare, Office of Education, National Center for Educational Statistics, Bond Sales for Public School Purposes, 1966-67 through 1969-70, Government Printing Office, Washington, D.C., various years. Construction: Adapted from School Management Magazine data file. Joseph Froomkin, et. al., Projections...loc. cit.

The potential of rural communities in the South to contribute to development of public education so that it can better serve their communities is surely greater than has been realized to date. Other states with little more average wealth, such as the Dakotas, have developed schools which served their local community by preparing their youth to compete relatively successfully for jobs in out of state cities. While their job has been bigger, Southern rural schools have not been as successful. The inequalities in wealth and the resulting low priority given to education for the poorer masses may be the basic underlying cause of poorer schools in Southern states compared with the Dakotas. To overcome the inequality problem at the local level, considerable federal, state, and university leadership will most surely be needed and probably welcomed by local leadership.

The benign neglect of these inequities is no more apparent than when one conducts a data search to compare the financial status of rural Southern school districts with other regions. The most recent projections to be found, those utilized by studies from the President's Commission on School Finance, are based on 1967-68 data. The Bureau of the Census has more recent data from the Census of Governments, but analysis of this data has not found its way into the literature. Likewise, the National Center for Education Statistics publishes a series of annual documents, "Digest of Education Statistics", "Projections of Education Statistics", and "The Condition of Education", all of which provide extensive information for education planners, but none of which provide information on inequities between types of school districts. Similarly, at state levels, Annual Reports of State Departments of Education include massive amounts of data but they clearly are not designed to highlight inequalities among school districts. As a starting point toward providing the necessary minimum amount of Federal and state leadership, current annual data designed to monitor inequities between regions and types of school districts should be made public. The least we should be able to expect of national and state leadership is a well publicized, continuous, up-to-date status report on the equality of rural Southern public education within each state and relative to the rest of the nation. Similarly, given this data base, regional projections should be updated regularly. Local communities, state departments of education, and collaborating universities should always be aware of the equality as well as the quality score.

University Research as a Leadership Component in Rural Public Education

One ENPRD project has been to search the Dissertation Abstracts International files for evidence of interest in rural education needs projections by doctoral candidates throughout the region. A perusal of the DATRIX II high frequency word list found in the DAI files reveals that 22,506 dissertations including the words "school" or "schools" in their titles have been written. Also, 3,803 titles include "educational", 11,861 include "education", and 1,865 contain "vocational" as a part of their title.

Table 8. Scalogram of Dissertation Abstract DATRIX II Search by State Name and Two Additional Sets of Descriptors: (1) School(s) and (2) Selected Analytic Terms

State	Selected Analytic Terms EdVo[1]	ReCo[2]	As[3]	DeInIm[4]	Pr[3]	Scale Score	Number of Dissertations[5]
Texas	1	1	1	1	0	4	48
Alabama	1	1	1	1	0	4	22
North Carolina	1	1	1	1	0	4	22
Tennessee	1	1	1	1	0	4	19
Mississippi	1	1	1	1	0	4	17
Missouri	1	1	1	0	0	3	44
Maryland	1	1	1	0	0	3	22
Florida	1	1	1	0	0	3	21
Kentucky	1	1	1	0	0	3	19
Arkansas	1	1	1	0	0	3	18
Georgia	1	1	1	0	0	3	14
Oklahoma	1	1	0	0	0	2	14
Louisiana	1	1	0	0	0	2	13
Virginia	1	1	0	0	0	2	12
Delaware	1	0	0	0	0	1	6
South Carolina	1	0	0	0	0	1	4
West Virginia	1	0	0	0	0	1	4
Dissertations	96	141	35	41	6		319

Code:

Re = relate, related, relating, relation, relates
Ed = educational
Vo = vocational
As = associate, associates, associating, associated, association
Co = compare, compares, compared, comparing comparison
In = influence, influences, influenced, influencing
Im = impact, impacting, impacts, impacted
De = determine, determined, determines, determination, determining
Pr = predict, predicts, predicting, predicted, prediction, predictable, projection, delphi, forecast

[1] 1 = one or more dissertation titles containing "educational or vocational" plus school(s) and state name in title
0 = no such dissertation

[2] 1 = four or more dissertations with indicated analytic terms
0 = three or fewer dissertations

[3] 1 = two or more dissertations with indicated analytic terms
0 = none or one dissertation

[4] 1 = three or more dissertations with indicated analytic terms
0 = two or fewer dissertations

[5] DATRIX II Search complete from 1965 to 1975.

Table 9. Solicitation of Community Involvement in Public Education Needs Projection: A Regional Comparison of Doctoral Dissertation Titles and Abstracts 1965-1975.

Region / Years	Needs Projection Methodology: Delphi (Panels) — Educators Only		Delphi (Panels) — Educators and Lay Leaders		Conventional (Cross Sectional) — Educators Only		Conventional (Cross Sectional) — Educators and Lay Leaders	
Southern States	No	%	No	%	No	%	No	%
1973-75	5	83	1	17	2	67	1	33
1969-72	0	-	0	-	2	50	2	50
1965-68	0	-	0	-	0	-	0	-
1965-75 Total	5	83	1	17	4	57	3	43
Non-South States								
1973-75	4	33	8	67	10	63	6	37
1969-72	3	75	1	25	3	75	1	25
1965-68	0	-	0	-	3	60	2	40
1965-75 Total	7	44	9	56	16	64	9	36

The ENPRD project has attempted to exploit this massive file to determine the extent and range of dissertation research in the area of needs projection. An initial DATRIX II search of titles in the DAI file used logical word roots such as education, schools, and vocation in combination with descriptors like Delphi, projection, forecast, need, objective, and predict. This search resulted in only 124 references dating back to 1920. Only 25 of these dissertations were produced in universities of 17 Southern states. Some 30 titles include the word Delphi. A manual search verified our finding that dissertation-level education needs projection research is scarce.

The next DATRIX II search strategy was designed to couch this finding in the context of a logical progression from "description" research, to "comparative" research, and finally to prediction, projection, or forecasting. Given the state of the art and the lack of theory to guide forecasting methodologies it is logical to expect that most titles would fall in the former categories and fewer in the latter. This search was designed so that we were able to enumerate for 17 Southern states dissertation titles which contain (1) a state name, (2) the word "school(s)", and (3) selected terms which suggest the analytic nature of the research design employed. Using these descriptors, 319 titles, purged of those referring to school(s) in universities, e.g. law school, were retrieved. As may be seen in the scalogram presented in Table 8, all states have produced a thesis containing in its title the words "school(s)" in combination with "educational" or "vocational", but none of the selected analytic descriptors. While some may contain analytic descriptors not included in the search, it has been assumed that these titles are descriptive studies.

Of the 319 titles, 141 contained analytic terms with "compar" or "relat" as word roots, but only 14 of the 17 states produced at least four such titles. A similar analytic root, "associat", which like "compar" and "relat" implies a "comparative" type study, was contained in two or more titles in 11 states. Finally, the fourth and fifth scale items contain analytic descriptors which imply an underlying causal model. Only five states produced three or more dissertations containing "determin", "influenc", or "impact", while no single state produced two or more theses with the root "predict", "project", or "forecast".

The cumulative pattern is instructive. States in which causal analysis is beginning are also the ones in which considerable descriptive and comparative homework has preceded. However, no "critical mass" of two or more doctoral dissertations which "predict", "project", or "forecast" by "Delphi" or other "need" assessment methodology while specifying one or more 17 Southern states, has been produced to date.

To be sure, there is evidence of ongoing work on forecasting methodologies in the region. Only three of some ten types of fore-

casting - extrapolative, intuitive, and survey - as identified by Daniel P. Harrison, are apparently utilized to a significant degree in education needs projection.[8] In the extrapolation category, dissertations at Florida state indicate work on methods tying education projections to manpower needs.[9] Only one dissertation attempts to project school quality.[10] No more than three dissertations produced in the region are readily identified as having explored survey techniques to do "occupational and status projections" of Southern youth.[11] If plans and programs to link Southern youth more directly to Southern occupational opportunities are to bear fruit and dependence on in-migration of skills is to be reduced, more extrapolative forecasting needs to be closely linked to planning the regions vocational and educational programs.

In the rhelm of intuitive forecasting, the most popular approach among educators, work on Delphi methodology is likely to make a contribution toward more successful community involvement in the education needs assessment process. However, dissertation research, because of its potential for innovation, needs to be striking out more boldly in providing examples of applying the Delphi technique to mixed community/educator panels. The technique, because it takes into account and explicitly provides for feedback and reevaluation on the part of need assessment participants, has considerable potential for facilitating dialogue and consensus formation.

A time-series analysis of dissertation abstracts identified in the above described search shows utilization of the Delphi technique to be very recent in doctorate degree granting institutions in the region. Six have been produced, all since 1973.[12] Only one of these explored methodological problems involved in utilizing mixed panels as opposed to educator only panels. Outside the region, response to the community involvement movement was more apparent. Of 16 produced, all since 1969, 9 involved mixed panels. Since 1973, 8 of 12 such identified dissertations outside the region have utilized mixed panels. Traditional methodologies involving one-shot surveys of opinion were more frequently applied to educators only, both inside and outside the South.

The pattern in the South of using Delphi with educators only may reverse inself during the next four years as it did in the non-South during this period. On the other hand the methodological difficulty in dealing with mixed panels with widely varying perspectives may be greater in the South than elsewhere. As noted by Harrison,[13] difficulties in identifying and selecting a balanced panel of experts from different background is problematic. Furthermore, could one expect authoritative convergence from divergent areas of expertise? Additionally, there is the question of whether the technique tends to force conformity. Indeed such a latent "gentle persuation" characteristic may underlie the choice of the technique in some instances. In any event use of the technique provides at least one mode for citizen participation in education decision making.

In sum, the potential for University sponsored research, such as dissertations, to pave the way for more fruitful community involvement in Southern rural education appears to be considerable.

The Federal Leadership Component in Rural Public Education

Aside from Dissertation Abstracts, the single largest indexing of education literature is, of course, the Education Resource Information Center (ERIC) and, specifically, for the purpose of the ENPRD project, the clearinghouse on Rural Education and Small Schools (CRESS) at New Mexico State University. A search of the ERIC-CRESS files plus clearinghouses for Administration, Career and Vocational Education provided another strong indication that very little has been documented on rural-community involvement in education planning in the South. Work, however, has been done directly or sponsored by ERIC-CRESS in the form of synthesis of a range of recommendations and rationals found in the literature. Principally, these are recommendations which if implemented at federal, state and local levels would provide for a broad based improvement in rural schools throughout the region rather than just the occasional token appearance of a demonstration rural school blessed with exceptional leadership and foundation or government funding.

Moe and Tamblyn[14] emphasize the importance of the Federal Government taking more responsibility for leadership in articulating a national policy for rural education. Quoting a USOE Task Force Report on Education, they stress the recommendation to establish a rural unit in the U. S. Office of Education and to induce the several states to establish Offices of Rural Education within their Departments of Education. Coordination of the education planning activities of this type of structure with the rural development efforts of the states, their planning and development districts, and with activities under the Rural Development Act of 1972 would provide a unified format through which communities could begin to articulate toward their common education goals. When no such structure exists, rural communities cannot be expected to contribute up to their potential in any national or state level effort to reduce inequities among rural districts or between regions or types of districts. If this is understood at federal levels, and there is a genuine concern about inequalities among our nations schools, some action would surely be forthcoming. In 1976, however, Everett D. Edington in his synthesis of literature on strengthening the rural school reports that "there has been no indication that the report of the Task Force has ever been read, much less acted upon."[15]

The question then must be, "who is interested enough in the plight of rural education to give it priority, and to provide resources to organize a lobby for development of a rural education infrastructure which would provide rural communities linkage to state and national programs designed to facilitate equal education opportunity for all?"

We have another session tomorrow, Session 16, "Rural Education Needs Projections Through Citizens Participation", which is organized to provide us some insight into the perspectives of national, state, and local community inquiry into this question.

In sum, the evidence reported here suggests that relatively little is documented on adapting community change models and education needs projection and planning techniques which endeavor to involve the rural Southern community at both state and local levels. Available projections are not up-to-date and are perhaps misleading at local levels; local leadership, when brave enough to raise its head, is left dangling with few technical services to link the local community to state departments, university expertise or federal government programs. Hopefully, the above discussion highlights the increasing importance to the region of more collaboration among university researchers, the federal government, state departments of education, and the people of rural school districts in planning and mobilizing for the improvement of public education in rural areas.

Footnotes

[1]Neil McElroy, Chairman. 1972. Final Report of the President's Commission on School Finance: Schools, People and Money - The Need for Educational Reform. p. x.

[2]Ibid., p. 147.

[3]W. Vance Grant and George Lind. Digest of Education Statistics: 1975 Edition. National Center for Education Statistics. U. S. Government Printing Office, Washington, D. C. 1976.

[4]Betsy Levin, Thomas Muller, William J. Sconlon, and Michael A. Cohen. Public School Finance: Present Disparities and Fiscal Alternatives. A Report prepared for the President's Commission on School Finance by the Urban Institute, Washington, D. C., 1972, Volume I, p. 248.

[5]C. Arnold Anderson. Southern Education: A new research frontier. Edgar T. Thompson, Editor. Perspective on the South: Agenda for Research. Duke University Press Durham, N. C. 1967. p. 187.

[6]Kenneth A. Simon and Martin M. Frankel. 1976. Projections of Education Statistics to 1984-85. National Center for Education Statistics. U. S. Government Printing Office. Washington, D. C. Table 37, p. 89.

[7]U.S.D.A. Rural Development Sixth Annual Report of the President to the Congress on Government Services to Rural America. Rural Development Service, U. S. D. A. Washington, D. C. 20250. 1976. p. 24.

[8]Daniel P. Harrison. 1976. Social Forecasting Methodology: Suggestions for Research, Number 7 in Social Science Frontiers. Russel Sage Foundation. New York. 1976.

[9]Anan Srisopa. 1971. Methodology for Forecasting Manpower Requirements as a Basis for Long Range Education Planning. (Ph.D. Florida State University); and

George Thomas Wajdowicz. 1973. Multi-procedural Examination of Public School Enrollment Projection Techniques. (Ph.D. Florida State University).

[10]Sedlak, Louis A. 1965. The Projection of School Quality from Staffing Adequacy Measures (Ed.D., University of Maryland).

[11]Azuma, Henry Tatsuo. 1974. Educational and Occupational Projections of Male Black Youth: A Delinquent - Non-Delinquest Comparison. (Ph.D., The Louisiana State University and Agricultural and Mechanical College).

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[12]Abungu, Cornelio Oyola. 1975. A Delphi Study to Determine Factors Which Contribute to Success in Administration of AA High Schools in Texas. (Ed.D., East Texas State University);

Brooks, Rickey James. 1974. A Delphi Study of Parent's, Teacher's School Board Member's, School Administrator's, School Counselor's, and Student's Perceptions of the Roles of Vocational and Technical Education in Oklahoma (Ed.D., Oklahoma State University);

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O'Connell, John Howard. 1974. Delphi Assistance to Administration: The Development and Testing of an Aid to Educational Decision Making. (Ed.D., North Carolina State University at Raleigh).

[13]Daniel P. Harrison. op. cit., pp. 17-18.

[14]Edward O. Moe and Lewis R. Tamblyn. 1974. Rural Schools as a Mechanism for Rural Development. National Education Laboratory Publishers, Inc., Austin, Texas.

[15]Everett D. Eddington, Direction ERIC-CRESS, 1976. Strengthening the Small Rural School. National Educational Laboratory Publishers, Inc., Austin, Texas.

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